

Title (en)  
In-cell battery management device

Title (de)  
Integrierte Batterieverwaltungsvorrichtung

Title (fr)  
Dispositif de gestion de batterie intégré

Publication  
**EP 2600443 A2 20130605 (EN)**

Application  
**EP 12181677 A 20120824**

Priority  
US 201113297715 A 20111116

Abstract (en)  
Various embodiments relate to an in-cell battery management device including: an integrated circuit (IC) including a controller, a resistive balancer, a voltage sensor, and a pressure sensor; and an IC package that encloses the IC having a hole over the pressure sensor wherein the hole allows the pressure sensor to measure pressure in a battery cell; wherein the IC package is contact with the battery cell.

IPC 8 full level  
**H04Q 9/00** (2006.01); **G01R 31/36** (2006.01); **H01M 10/42** (2006.01); **H01M 10/48** (2006.01); **H02J 7/00** (2006.01); **H01M 50/502** (2021.01)

CPC (source: EP US)  
**H01M 10/4207** (2013.01 - EP US); **H01M 10/4257** (2013.01 - EP US); **H01M 10/445** (2013.01 - US); **H01M 10/48** (2013.01 - EP US); **H01M 50/578** (2021.01 - US); **H04Q 9/00** (2013.01 - EP US); **G01R 31/364** (2018.12 - EP US); **G01R 31/3835** (2018.12 - EP US); **H01M 50/502** (2021.01 - EP US); **H01M 2010/4271** (2013.01 - EP US); **H01M 2010/4278** (2013.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Cited by  
JP2015230208A; FR3031628A1; EP4239756A1; WO2016113278A1; WO2015186421A1; WO2016183418A1; WO2016074844A1; US9954384B2; US10107867B2; US10700392B2; EP4057421A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2600443 A2 20130605; EP 2600443 A3 20131002; EP 2600443 B1 20151104**; CN 103117418 A 20130522; CN 103117418 B 20160518; US 2013122332 A1 20130516; US 9608297 B2 20170328

DOCDB simple family (application)  
**EP 12181677 A 20120824**; CN 201210457718 A 20121114; US 201113297715 A 20111116